

## **REMARKS/ARGUMENTS**

The Office Action of October 26, 2006 has been carefully reviewed and this response addresses the Examiner's concerns as stated in the Office Action. All objections and rejections are respectfully traversed.

### **I. STATUS OF THE CLAIMS**

Claims 1-6 are pending in the application.

Claims 3 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the invention.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Stone et al. (US 5,982,515)

Claims 7-17 have been canceled without prejudice.

Claims 1, 4 and 6 are amended.

### **Support in the specification for the claim amendments**

The amendment to claim 1 specifies that which is inherent; that is, after subsequently selectively directing the beam, a subsequently selectively directed beam is obtained. The relationship between the selectively directed beam and the subsequently selectively directed beam can be seen from figures 2 through 5 and, for example, paragraph 32. Support for an amendment to claim 4 are found in paragraphs 36 and 37 of the specification. Support for the amendment to claim 6 is found in paragraph 39 of the specification.

### **II. AMENDMENTS TO THE SPECIFICATION**

Paragraph 0016 of the specification has been amended to correct a typographical error.

### **III. CLAIM REJECTIONS UNDER 35 U.S.C. 112**

*Claims 3 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the invention.*

Defining the subsequently selectively directed beam in claim 1 renders the term "the selectively directed beam" definite in claim 3 since the term does not refer to "subsequently selectively directed beam."

Although the definition of crosstalk is inherent in relation to optical systems (see for example, Optical Crosstalk in Fiber Radio WDM Networks, IEEE transactions on microwave theory and techniques, volume 49 number 10, October 2001, pages 2030-2035- where crosstalk is the subject but is not defined). Crosstalk is unwanted signal in a nonselective channel originating from a signal in a selected channel. (See, for example, "As this Optical crosstalk is one of them, and it is caused by interference from channels operating at the same nominal wavelength (inband crosstalk)" from the introduction to *Crosstalk in WDM Communication Networks*, 2002, Kluwer, ISBN 1-4020-7026-8). US patent 5,982,515, which is incorporated by reference into the Applicant's specification, in column 7, lines 20 through 24, states that "scatter, imperfect diffraction efficiency and switching contrast, and other effects combine inevitably resulting in noise signals that propagate in the nonselected channels." This it is those noise signals that are referred to as crosstalk, as one skilled in the art will recognize. Applicants respectfully state that, although the original claim was understandable to one skilled in the art due to the inherent understanding of crosstalk, the clause "said at least one crosstalk induced output electromagnetic radiation beam being present in at least one nonselected channel" renders the claim even more definite and understandable by one skilled in the art.

#### IV. CLAIM REJECTIONS UNDER 35 USC § 102(b)

*Claims 1-9, 11, 13, 14 and 16 were rejected under 35 U.S.C. §102(b) as being anticipated by Stone et al. (U.S. 5,982,515, the '515 patent).*

Claim 1 recites a method for introducing selectable amounts of temporal dispersion into a signal. The '515 patent does not teach temporal dispersion compensation. The '515 patent is directed to, in col. 4, lines 34-36, providing "digital free space optical time delay (shifter) and routing network. "The '515 patent teaches, in col. 5, lines 9-11, that "each optical path can add a preselected constant increment in time delay to a transmitted signal." The '515 patent does not teach introducing selectable amounts of temporal dispersion.

The '515 patent does not teach or show "angularly separating spectral components of the electromagnetic radiation beam, by the steps of selectively directing and subsequently selectively directing the electromagnetic radiation beam in order to introduce the selectable amounts of temporal dispersion," a limitation of claim 1. Therefore, there is no showing or teaching of how the system of the '515 patent is used to introduce the selectable amounts of temporal dispersion and Applicant asserts that reliance on inherency for anticipation is not proper.

Also, as recently stated by the Court of Appeals for the Federal Circuit in *Perricone vs. Medicis Pharmaceutical Corp*, 432 F. 3d 1368, 1379 (Fed. Cir. 2005), a patent for a system or apparatus does not prevent a subsequent inventor from obtaining a patent on a new method for using the system or apparatus. As in *Perricone*, where the anticipating reference did not teach treatment of skin sunburn, the '515 patent does not teach introducing the selectable amounts of temporal dispersion. Since the '515 patent does not teach or disclose introducing the selectable amounts of temporal dispersion, principles of inherency do not preclude a method invention for the new use, introducing the selectable amounts of temporal dispersion.

Claims 2-3 are dependent on claim 1, and as described above, the 515 patent does not teach or disclose at least one limitation of claims 2-3

Claim 2 recites the additional limitation of repeating step b) until a direction of propagation of the electromagnetic radiation beam is substantially parallel to an input direction. The Examiner, in the Office Action, the limitation there in a shown in Figure 4. Since claimed 2 is dependent on claim 1, the '515 patent does not teach or disclose at least one limitation of claim 2.

Regarding claim 4, the '515 patent does not teach or show "a method for compensating angular dispersion." As stated above, the '515 patent is directed to, in col. 4, lines 34-36, providing "digital free space optical time delay (shifter) and routing network. "The '515 patent teaches, in col. 5, lines 9-11, that "each optical path can add a preselected constant increment in time delay to a transmitted signal." The '515 patent does not teach "rendering, after selective diffraction, a direction of propagation of the electromagnetic radiation output

beam parallel to an input direction in order to compensate angular dispersion," a limitation of claim 4.

Claims 5 and 6 are dependent on claim 4 and, therefore, includes at least one limitation of claims 5 or 6 is not taught or disclosed by the '515 patent.

Regarding claim 6, the '515 patent teaches "the incorporation therein of a saturable absorber noise suppressor 26 interposed between the optical redirection component or diffractive microlens array 22 and detector 24." The saturable absorber in the '515 patent is used for reducing noise or crosstalk. The '515 patent does not teach or disclose selectively diffracting at least one crosstalk induced output electromagnetic radiation beam, said at least one crosstalk induced output electromagnetic radiation beam being present in at least one nonselected channel.

Applicant respectfully asserts that claim 1 and claim 4 or claim 6 are not inherently or explicitly anticipated by the '515 patent. Since claims 2 and 3 are dependent on claim 1 and claims 5 and 6 are dependent on claim 4, Applicant respectfully asserts that claims 1-6 are not inherently or explicitly anticipated by the '515 patent.

#### V. CONCLUSION

In conclusion, in view of the above remarks, Applicant respectfully asserts that claims 1-6 in this application are now in condition for allowance and respectfully request the Examiner find claims 1-6 allowable over the prior art and pass this case to issue.

The Director of Patents and Trademarks is hereby authorized to charge any required fees, or to credit overpayment, to Deposit Account No. 50-3718.

Appl. No. 10/700,982  
Amendment and Response dtd. Jan. 26, 2007  
Reply to Office Action of Oct. 26, 2006

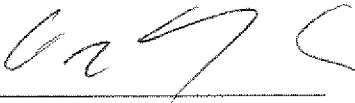
The following information is presented in the event that a call may be deemed  
desirable by the Examiner:

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Respectfully submitted,  
Thomas W. Stone, Applicant,

Date: January 25, 2007

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